DERWENT-ACC- 2004-362653

NO:

DERWENT-WEEK: 200434

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TITLE:

Test method of multi-chip package using monitor burn-

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PATENT-ASSIGNEE: SAMSUNG ELECTRONICS CO LTD[SMSU]

PRIORITY-DATA: 2002KR-0036073 (June 26, 2002)

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE PAGES MAIN-IPC

KR 2004001017 A January 7, 2004 N/A

001 G01R 031/26

APPLICATION-DATA:

PUB-NO

APPL-DESCRIPTOR APPL-NO

KR2004001017A N/A

APPL-DATE

2002KR-0036073 June 26, 2002

INT-CL (IPC): G01R031/26

ABSTRACTED-PUB-NO: KR2004001017A

BASIC-ABSTRACT:

NOVELTY - A test method of a multi-chip package using a monitor burnin tester is provided to reduce test time and increase test efficiency.

DETAILED DESCRIPTION - A multi-chip package having at least two semiconductor devices, is tested by using a monitor burn-in tester. One test program is used for carrying out the multi-chip package test. Each semiconductor device is sequentially carried out with the test after contacting a plurality of test pins to the semiconductor

10/16/05, EAST Version: 2.0.1.4



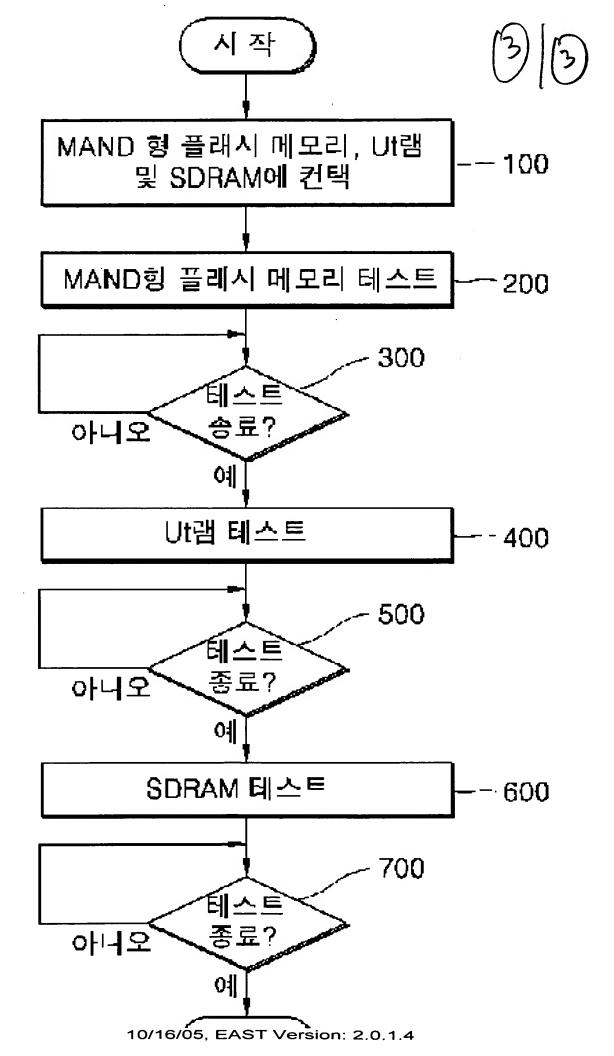
devices (100, 200, 400, 600). The <u>test</u> program has a multiplexer control function capable of selecting all the multiplexer functions included to the <u>semiconductor</u> devices. The <u>test program</u> includes an input/output <u>masking function</u> for masking the input/output port of a <u>test</u> board unused by the different input/output ports of the <u>semiconductor</u> devices.

CHOSEN-DRAWING: Dwg.1/10

TITLE-TERMS: TEST METHOD MULTI CHIP PACKAGE MONITOR BURN TEST

DERWENT-CLASS: S01 U11

EPI-CODES: S01-G01A3; U11-F01C3;



Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	1	"20040145387"	US-PGPUB; USPAT	OR .	ON	2005/05/26 16:54
S2	4876	324/765,158.1.ccls.	US-PGPUB; USPAT	OR	ON	2005/02/22 14:47
S3	2715	324/765.ccls.	US-PGPUB; USPAT	OR	ON	2005/02/22 14:47
S4	2651	324/158.1.ccls.	US-PGPUB; USPAT	OR	ON	2005/02/22 14:47
S5	490	S3 and S4	US-PGPUB; USPAT	OR	ON	2005/02/22 14:47
S6	42	S5 and load\$4 and unload\$4	US-PGPUB; USPAT	OR	ON	2005/02/22 14:48
S7	16	S5 and load\$4 and unload\$4 and sort\$4	US-PGPUB; USPAT	OR	ON	2005/02/22 14:48
S8	1	"20040112142"	US-PGPUB; USPAT	OR	OFF	2005/05/23 14:54
S9	1	"20010026152"	US-PGPUB; USPAT	OR	OFF	2005/05/23 14:57
S10	2	"6462534"	US-PGPUB; USPAT	OR ·	OFF	2005/05/23 14:52
S11	1	"20030115519"	US-PGPUB; USPAT	OR	OFF	2005/05/23 18:03
S12	1	"20040119491"	US-PGPUB; USPAT	OR	OFF	2005/05/23 14:44
S13	1	"20050007140"	US-PGPUB; USPAT	OR	OFF	2005/05/23 18:04
S14	1	"20040207387"	US-PGPUB; USPAT	OR	OFF	2005/05/23 14:46
S15	6	(bang near jeong).in. and scan	US-PGPUB; USPAT	OR	OFF	2005/05/23 15:05
S16	13	(bang near jeong).in. and scan\$4	US-PGPUB; USPAT	OR	OFF	2005/05/23 18:06
S17	0	(bang near jeong).in. and scan\$4 and burn adj in	US-PGPUB; USPAT	OR	OFF	2005/05/23 14:48
S18	1	(bang near jeong).in. and scan\$4 and burn\$2in	US-PGPUB; USPAT	OR	OFF	2005/05/23 14:48
S19	0	(S8 S9 S10 S11 S12 S13 S14)	US-PGPUB; USPAT	AND	OFF	2005/05/23 14:52
S20	0	(S8 S9 S10 S11 S12 S13 S14) scan	US-PGPUB; USPAT	AND	OFF	2005/05/23 14:54
S21	0	S8 scan	US-PGPUB; USPAT	AND	OFF	2005/05/23 14:54
S22	0	S9 scan\$4	US-PGPUB; USPAT	AND	OFF	2005/05/23 14:53

S23	0	S8 scan\$4	US-PGPUB; USPAT	AND	OFF	2005/05/23 14:53
S24	0	S10 scan\$4	US-PGPUB; USPAT	AND	OFF	2005/05/23 14:53
S25	0	S11 scan\$4	US-PGPUB; USPAT	AND	OFF	2005/05/23 14:53
S26	0	S12 scan\$4	US-PGPUB; USPAT	AND	OFF	2005/05/23 14:53
S27	0	S13 scan\$4	US-PGPUB; USPAT	AND	OFF	2005/05/23 14:53
S28	0	S14 scan\$4	US-PGPUB; USPAT	AND	OFF	2005/05/23 14:53
S29	0	(S8 S9 S10 S11 S12 S13 S14) package	US-PGPUB; USPAT	AND	OFF	2005/05/23 14:54
S30	1	S8 package	US-PGPUB; USPAT	AND	OFF	2005/05/23 14:55
S31	1	S8 package	US-PGPUB; USPAT	AND	ON	2005/05/23 14:55
S32	13	(bang near jeong).in. and scan\$4	US-PGPUB; USPAT	OR	OFF	2005/05/23 15:06
S33	3	(bang near jeong).in. and scan\$4 and program	US-PGPUB; USPAT	OR	OFF	2005/05/23 15:06
S34	3	(bang near jeong).in. and scan\$4 and program	US-PGPUB; USPAT	OR .	ON	2005/05/23 15:06
S35	1812	burn\$1in and mask\$4	US-PGPUB; USPAT	OR	OFF	2005/05/23 15:20
S36	67	(burn\$1in and mask\$4).ab,clm.	US-PGPUB; USPAT	OR	OFF	2005/05/23 15:20
S37	10728	sram same dram	USPAT	OR	OFF	2005/05/23 17:30
S38	186	439/81.ccls.	USPAT	OR	OFF	2005/05/23 17:08
S39	511	sram same dram same test\$4	USPAT	OR	OFF	2005/05/23 17:30
S40	28	sram same dram same test\$4 same multiplex\$4	USPAT .	OR ·	OFF	2005/05/23 17:32
S41	733	365/201.ccls. and (mux multiplex\$4)	USPAT	OR	OFF	2005/05/23 17:33
S42	123	365/201.ccls. and (mux multiplex\$4) and sram and dram	USPAT	OR	OFF	2005/05/23 17:33
S43	18	365/201.ccls. and (mux multiplex\$4) and sram and dram and burn\$4	USPAT	OR	OFF	2005/05/23 17:48
S44	. 8	324/760.ccls. and test\$4 with (different multiple) with types with semiconductor	USPAT	OR	OFF	2005/05/23 17:55
S45	9	365/201.ccls. and test\$4 with (different multiple) with types with semiconductor	USPAT	OR	OFF	2005/05/23 17:55

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S46	7	(bang near jeong).in. and multiplex\$4	US-PGPUB; USPAT	OR	OFF	2005/05/23 18:08
S47	1103	multiplex\$4 same masking	US-PGPUB; USPAT	OR	OFF	2005/05/23 18:09
S48	44	multiplex\$4 same masking and burn\$4	US-PGPUB; USPAT	OR	OFF	2005/05/23 18:09
S49	37	(test\$4 with multi\$1chip).ti.	USPAT	OR	OFF	2005/05/25 15:11
S50	26	(test\$4 with multi adj chip).ti.	USPAT	OR	OFF	2005/05/25 15:23
S51	25	S49 and S50	USPAT	OR	OFF	2005/05/25 15:08
S52	1	S50 not S51	USPAT	OR	OFF	2005/05/25 15:08
S53	4	(test\$4 with multi\$1chip with type). ti.	USPAT	OR	OFF	2005/05/25 15:09
S54	10	(test\$4 with multi\$1chip).ti. and burn-in	USPAT	OR	OFF	2005/05/25 15:11
S55	1	(test\$4 with multi\$1chip).ti. and burn adj in	USPAT	OR	OFF	2005/05/25 15:11
S56	0	(test\$4 with multi adj chip).ti. and nurn-in	USPAT	OR	OFF	2005/05/25 15:21
S57	6	(test\$4 with multi adj chip).ti. and burn-in	USPAT	OR	OFF	2005/05/25 15:21
S58	3	(test\$4 with mcm).ti.	USPAT	OR	OFF	2005/05/25 15:24
S59	0	test\$4 with different with temperature same multi adj cipp	USPAT	OR	OFF	2005/05/25 15:25
S60	0	test\$4 with different with temperature same multi adj chip	USPAT	OR	OFF	2005/05/25 15:26
S61	0	test\$4 with different with temperature same multi-chip	USPAT	OR	OFF	2005/05/25 15:26
S62	0	test\$4 with different with temperature same mcm	USPAT	OR	OFF	2005/05/25 15:26
S63	0	test\$4 with different with temperature same mcm	USPAT	OR	ON	2005/05/25 15:26
S64	0	test\$4 with different with temperature same mcm	US-PGPUB; USPAT	OR	ON	2005/05/25 15:26
S65	1	test\$4 with different with temperature same multi-chip	US-PGPUB; USPAT	OR	OFF	2005/05/25 15:26
S66	1	test\$4 with different with temperature same multi adj chip	US-PGPUB; USPAT	OR .	OFF	2005/05/25 15:26
S67	1	test\$4 same different with temperature same multi adj chip	US-PGPUB; USPAT	OR	OFF.	2005/05/25 15:27
S68	0	test\$4 same different with temperature same multi adj chip	USOCR	OR	OFF	2005/05/25 15:27
S69	0	test\$4 same different with temperature same multi adj chip	EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/05/25 15:27

S70	2	different with temperature same multi adj chip	EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/07 14:04
S71	0	temperature same different with type with multi adj chip	EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/05/25 15:28
S72	2	different with type with multi adj chip	EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/05/25 15:29
S73	87	different with type with multi adj chip	US-PGPUB; USPAT; USOCR	OR	OFF	2005/05/25 15:29
S74	6	S73 and "324"/\$.ccis.	US-PGPUB; USPAT; USOCR	OR	OFF	2005/05/25 15:30
S75	7	("4556975").PN. OR ("6198663"). URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2005/05/25 15:39
S76	57	324/760.ccls. and (mcm (multi adj chip))	US-PGPUB; USPAT; USOCR	OR	OFF	2005/05/25 15:40
S77	5	324/760.ccls. and (mcm (multi adj chip)) and different with temperature	US-PGPUB; USPAT; USOCR	OR	OFF	2005/05/25 15:41
S78	52	S76 not S77	US-PGPUB; USPAT; USOCR	OR	OFF	2005/05/25 15:54
S79	132	257/48.ccls. and burn-in	US-PGPUB; USPAT; USOCR	OR	OFF	2005/05/25 15:54
S80	10	257/48.ccls. and burn-in and different with temperature	US-PGPUB; USPAT; USOCR	OR	ON	2005/05/25 15:54
S82	1	(SDRAM DRAM different temperature).clm.	US-PGPUB; USPAT	AND	ON	2005/05/26 16:55
S83	0	(SDRAM DRAM different with temperature).clm.	US-PGPUB; USPAT	AND	ON	2005/05/26 17:12
S84	23	(test\$4 plurality with semiconductor different with temperature).clm.	US-PGPUB; USPAT	AND	ON	2005/05/26 17:00
S85	270	SDRAM DRAM different with temperature	US-PGPUB; USPAT	AND	ON	2005/05/26 17:16
S86	0	SDRAM DRAM different with temperature	USOCR	AND	ON	2005/05/26 17:13
S87	1	SDRAM DRAM different with temperature	EPO; JPO; DERWENT; IBM_TDB	AND	ON	2005/05/26 17:13
S88	108	SDRAM DRAM module different with temperature	US-PGPUB; USPAT	AND	ON	2005/05/26 17:37

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S89	77	SDRAM same DRAM module different with temperature	US-PGPUB; USPAT	AND	ON	2005/05/26 17:52
S90	47	testing adj mcm	US-PGPUB; USPAT	AND	ON	2005/05/26 17:52
S91	4	testing adj mcm sdram dram	US-PGPUB; USPAT	AND	ON	2005/05/26 18:06
S92	15	("5137836" "5539752" "5796746" "5807762" "5817535" "5844803" "5856923" "5907492" "5915231" "5927512" "6067507").PN. OR ("6238942"). URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2005/05/26 17:56
S93	0	testing adj muiti-chip adj module sdram dram	US-PGPUB; USPAT	AND	ON	2005/05/26 18:07
S94	0	testing adj multi-chip adj module sdram dram	US-PGPUB; USPAT	AND	ON	2005/05/26 18:07
S95	47	testing adj multi-chip adj module	US-PGPUB; USPAT	AND	ON	2005/05/26 18:07
S96	44	S95 not S90	US-PGPUB; USPAT	AND	ON	2005/05/26 18:07
S97	3	S95 S90	US-PGPUB; USPAT	AND	ON	2005/05/26 18:08
S98	91	S95 or S90	US-PGPUB; USPAT	AND	ON	2005/05/26 18:09
S99	22	S98 and different adj type	US-PGPUB; USPAT	AND	ON	2005/05/26 18:26
S10 1	20	(test\$4 adj program) (different adj type) (mcm or multi-chip)	US-PGPUB; USPAT	AND	ON	2005/05/26 18:28
S10 2	5	(test\$4 adj program) (different adj type) (mcm or multi-chip) temperature	US-PGPUB; USPAT	AND	ON	2005/05/26 18:31
S10 3	15	S101 not S102	US-PGPUB; USPAT	AND	ON	2005/05/26 19:07
S10 4	879	package with multiple with type	US-PGPUB; USPAT	AND	ON	2005/05/26 19:07
S10 5	0	package with multiple with type and dram and dsram and dimm	US-PGPUB; USPAT	AND	ON	2005/05/26 19:08
S10 6	0	package with multiple with type and dram and sdram and dimm	US-PGPUB; USPAT	AND	ON	2005/05/26 19:08
S10 7	31	package with multiple with type same (dram or sdram or dimm)	US-PGPUB; USPAT	AND	ON	2005/05/26 19:15
S10 8	0	package with multiple with type same (dram or sdram or dimm) and program	US-PGPUB; USPAT	AND	ON	2005/05/26 19:15
S10 9	0	package with multiple with type same (dram or sdram or dimm) and programm	US-PGPUB; USPAT	AND	ON	2005/05/26 19:15

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S11 0	5	package with multiple with type same (dram or sdram or dimm) and test\$4	US-PGPUB; USPAT	AND	ON	2005/05/26 19:35
S11 1	4	(US-6214641-\$ or US-5998865-\$ or US-5817535-\$ or US-5723907-\$). did.	USPAT	OR	OFF	2005/05/26 19:31
S11 2	86	("4992849" "4992850" "4996587" "5107328" "5137836" "5162947" "5239198" "5255156" "5280192" "5418687" "5465470" "5477082" "5480840" "5495398" "5610767" "5687028").PN. OR ("5723907" "5817535" "5998865" "6214641").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2005/05/26 19:31
S11 3	0	S112 and sdram and dram and test\$4 and program	US-PGPUB; USPAT; USOCR	OR	OFF	2005/05/26 19:32
S11 4	0	S112 and sdram and test\$4 and program	US-PGPUB; USPAT; USOCR	OR	OFF	2005/05/26 19:32
S11 5	0	S112 and sdram and test\$4 and program	US-PGPUB; USPAT; USOCR	OR	ON	2005/05/26 19:32
S11 6	0	S112 and test\$4 and program	US-PGPUB; USPAT; USOCR	OR	ON	2005/05/26 19:32
S11 7	6	S112 and sdram and dram and test\$4	US-PGPUB; USPAT; USOCR	OR	OFF	2005/05/26 19:33
S11 8	1	package with multiple with type same (dram or sdram) and test\$4	US-PGPUB; USPAT	AND	ON	2005/05/26 19:39
S11 9	0	(test\$4 with (simm or dimm) with sdram dram).ti.	US-PGPUB; USPAT	AND	ON	2005/05/26 19:40
S12 0	0	(test\$4 with (simm or dimm)).ti.	US-PGPUB; USPAT	AND	ON	2005/05/26 19:40
S12 1	9	(test\$4 with (simm or dimm)).ab.	US-PGPUB; USPAT	AND	ON	2005/05/26 19:40
S12 2	0	257/777.ccls. and (sram with dram with non\$1volatile)	EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/07 14:06
S12 3	0	257/777.ccls. and (sram with dram or non\$1volatile)	EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/07 14:06
S12 4	0	257/777.ccls. and (sram with dram)	EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/07 14:06

S12 5	6	257/777.ccls. and (sram with dram with non\$1volatile)	US-PGPUB; USPAT; USOCR	OR	OFF	2005/10/07 14:06
S12 6	6	257/777.ccls. and (sram with dram with non\$1volatile)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/07 14:26
S12 7	0	257/777.ccls. and (sram with dram with test\$4)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/07 14:14
S12 8	386	(sram with dram with test\$4)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/07 14:14
S12 9	20	(sram with dram with test\$4 with package\$4)	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/07 14:14
S13 0	5	(sram with dram with test\$4 with package\$4 and temperature)	US-PGPUB; USPAT; USOCR	OR	ON	.2005/10/07 14:15
S13 1	32	("4503537" "4513418" "5255229" "5297087" "5375091" "5381373" "5390129" "5424988" "5535164" "5557573" "5563833" "5577051" "5590079" "5592422" "5610866" "5615164" "5619462" "5629943" "5633877" "5638331" "5654925" "5657282" "5659551" "5668770").PN. OR ("6122760").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2005/10/07 14:19
S13 2	59	257/777.ccls. and (test\$4).clm.	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/07 14:54
S13 3	0	257/777.ccls. and (test\$4 with different with temperature).clm.	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/07 14:54
S13 4	2	257/777.ccls. and (test\$4 with temperature).clm.	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/07 14:42
S13 5	1	"6198663".pn.	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/07 14:47
S13 6	1	"5931311".pn.	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/07 14:47
S13 7	0	257/777.ccls. and (test\$4 and different with temperature).clm.	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/07 14:55
S13 8	0	257/777.ccls. and (test\$4 and program and temperature).clm.	US-PGPUB; USPAT; USOCR	OR	ON	2005/10/07 14:55

S13	1	257/777.ccls. and (test\$4 and	US-PGPUB;	OR	ON	2005/10/07 14:55
9 .		program).clm.	USPAT; USOCR			
S14 0	1	"6014316".pn.	USPAT	OR	OFF	2005/10/16 14:43
S14 1	74	mask\$4 adj function with block\$4	USPAT	OR	OFF	2005/10/16 17:18
S14 2	0	mask\$4 adj function with block\$4 and burn\$1in	USPAT	OR	OFF	2005/10/16 17:18
S14 3		mask\$4 adj function with block\$4 and burn adj in	USPAT	OR	OFF	2005/10/16 17:18
S14 4	2	mask\$4 adj function with block\$4 and burn	USPAT	OR	OFF	2005/10/16 17:19
S14 5	13	mask\$4 adj function with block\$4 and test	USPAT	OR	OFF	2005/10/16 17:19
S14 6	. 25	mask\$4 adj function with block\$4 and test	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/16 17:19
S14 7	31	mask\$4 adj function with block\$4 and test\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/16 17:19
S14 8	17	mask\$4 adj function with block\$4 and test\$4 and (semiconductor or integrated)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/16 17:19
S15 0	5	S145 and (semiconductor or integrated)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/16 17:22
S15 1	12	S148 not S150	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/16 17:27
S15 2		test adj program with block\$4 adj function	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/16 17:28

S15 3	1	test adj program with block\$4 adj function	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/10/16 17:28
S15 4	143	program with block\$4 adj function	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/16 17:28
S15 5	61	program with block\$4 adj function and (semiconductor or integrated)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/16 17:29
S15 6	36	program with block\$4 adj function and (semiconductor or integrated) and test\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/16 17:31
S15 7	1	program with block\$4 adj function and (semiconductor or integrated) and test\$4 and burn\$1in	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/16 17:29
S15 8	41	program with block\$4 adj function and package and test\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/10/16 17:30
S15 9	24	S156 and S158	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/10/16 17:30
S16 0	7	program with mask\$4 adj function and (semiconductor or integrated) and test\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/16 17:58

S16 1	1	S159 and S160	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/16 17:31
S16 2	1	2004-362653.NRAN.	DERWENT	OR	OFF	2005/10/16 17:53
S16 3	1	kr2004001017a	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/16 17:59
S16 4	1	KR2004001017A	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/16 17:59